brought to you by CORE



A Short History of the California LNG Terminal

用

HH

H H H

No. of Lot of Lo

9H

Linnerooth, J.

IIASA Working Paper

WP-80-155

October 1980

Linnerooth, J. (1980) A Short History of the California LNG Terminal. IIASA Working Paper. WP-80-155 Copyright © 1980 by the author(s). http://pure.iiasa.ac.at/1314/

Working Papers on work of the International Institute for Applied Systems Analysis receive only limited review. Views or opinions expressed herein do not necessarily represent those of the Institute, its National Member Organizations, or other organizations supporting the work. All rights reserved. Permission to make digital or hard copies of all or part of this work for personal or classroom use is granted without fee provided that copies are not made or distributed for profit or commercial advantage. All copies must bear this notice and the full citation on the first page. For other purposes, to republish, to post on servers or to redistribute to lists, permission must be sought by contacting repository@iiasa.ac.at

Working Paper

A SHORT HISTORY OF THE CALIFORNIA LNG TERMINAL

Joanne Linnerooth

October 1980 WP-80-155

Presented at the IIASA LEG Task Force Meeting, September 23-26, 1980

International Institute for Applied Systems Analysis A-2361 Laxenburg, Austria

TABLE OF CONTENTS

Introduction	
The Initial Pursuit of a Terminal Site	2
A Stalemate	2
The LNG Terminal Siting Act of 1977	3
The Present Status of California's LNG Terminal	4
Some Issues Raised by the California Siting Process	4
NOTES	9
REFERENCES	11
A PPEND IX	13

A SHORT HISTORY OF THE CALIFORNIA LNG TERMINAL

Joanne Linnerooth

Introduction*

During the last decade, three liquified natural gas (LNG) projects were proposed for California. At this writing, Pacific Lighting Corporation and Pacific G as and Electric Company are still seeking government permits for two of these projects, involving the import of liquified natural gas from Indonesia and South Alaska. The third LNG project, proposed in 1974 by the El Paso Company, was to bring Alaskan North Slope gas by ocean carriers to a receiving terminal in Southern California. This proposal has been rejected in favor of an overland pipeline.

While these three projects are interrelated, this case history will focus on the Indonesian LNG project. The intent of this brief history is to outline the most important events of this decade-long controversy (for more detailed case histories, see A hern 1978, and W estern 1978). A discussion of the issues underlying this controversy follows. (See the A ppendix for a Summary of M ajor Events Timetable.)

The research reported in this paper is supported by the Bundesministerium fuer Forschung and Technologie, F.R.G., contract no. 321/7591/RGB 8001. While support for this work is gratefully adknowledged, the views expressed are the author's own, and are not necessarily shared by the sponsor.

The Initial Pursuit of a Terminal Site

Based on projections of decreasing natural gas supplies and increasing needs, Pacific Lighting Corporation¹ began in the late 1960's to pursue supplies from Indonesia and Cook Inlet, Alaska. In 1972, a letter of intent was signed by PacIndonesia and Pertamina (the Indonesian state-owned oil company) for the purchase of LNG at the rate of about 540 million cubic feet per day. After three years of price negotiations, the LNG contract was approved by the Indonesian government.

Meanwhile, Pacific Lighting Corporation had created a subsidiary, the Western LNG Terminal Company (Western) for the purpose of planning and building two import terminals. In 1972, Western was joined by the El Paso Natural Gas Company which was seeking a site to receive gas from Alaska's North Slope. After somewhat limited site screening, the Port of Los Angeles was chosen to receive gas from Cook Inlet and Oxnard was chosen to receive gas from Indonesia, because El Paso had a corporate policy of not siting a LNG facility within ten miles of a populated area, the remote Point Conception (Little Cojo Bay) site was chosen to receive gas from the North Slope.

In 1974, applications for each of these sites were filed with the Federal Power Commission (FPC).² In support of the populated Los Angeles and Oxnard sites, W estern commissioned two risk assessment studies (Science Applications, Inc. 1975a,b) which showed the safety risks to be acceptably low. Based upon probabilities of marine and shore LNG operations these reports generated estimates of the likelihood that members of the public would be killed during any one year from terminal operations. In the usual manner, these risks were compared to other possible causes of death including, e.g., ill health and occupatonal hazards. As required by federal law, environmental impact statements for both sides were prepared by the Federal Power Commission (FPC). In addition, Oxnard commissioned a separate study of the environmental effects (Socio-Economic Systems, undated).

In December, 1977, after three years of hearings, the FPC conditionally approved the Oxnard site, but the Port of Los Angeles was rejected as a possible site upon the discovery of an earthquake fault (for a critical review of this lengthy approval process, see W estern 1978). El Paso's scheme to import gas from Alaska's North Slope to Point Conception was rejected in favor of a competing pipeline project through Canada.

A Stalemate

The local reactions to federal approval of Oxnard and to federal rejection of the Port of Los Angeles were both encouraging and discouraging to the oil companies. The Los Angeles City Council voted that the benefits of the \$155 million terminal outweighed the risks posed by the earthquake fault;³ alternatively, the citizens of Oxnard became sensitized to the risks of the planned \$300 million terminal.⁴ The Oxnard public reaction, ignited by a published worst-case accident scenario, and fueled by growing disagreements among the expert community over the risks from LNG, slowed the approval process.

Though W estern would have liked to defend its position at Oxnard by pointing out that the terminal would meet all standards and regulations governing terminal design and operation, the reality was that a comprehensive set of federal regulations to ensure public safety did not exist. During deliberations on these three LNG terminals, both the Coast Guard (CG) and the Office of Pipeline Safety (OPSO)⁵ made moves proposing LNG terminal safety regulations. These regulations have only quite recently been made available (see U.S. D epartment of Transportation 1980a,b). Because the difficult task of assuring the safe operation of an LNG terminal fell on the shoulders of the nonexpert local authorities, much of the blame for the uncertainties and problems surrounding LNG terminal siting has been seen to lie with the federal agencies (Ahern 1978). The relationships between the federal authorities and the state authorites for LNG facility approval and siting is deliberately vague. The federal government, by choosing not to darify its mandate, has in effect chosen not to challenge state authority. In fact, the DOE has intentionally avoided a confrontation in the California case, in spite of their advocacy of the Oxnard site. Thus, though federal and local approval of a site was viewed as necessary, the final approval was vested in a state agency--the California Coastal Commission (CCC), which was created in 1976, is composed of 12 lay people appointed from a variety of sources and serving only parttime, and has responsibility for the protection of the California coastline. After much painful deliberation, the CCC decided against siting a facility in a populated area in favor of a remote spot on the beautiful California coastline; that is, they decided "against birds and for people." In 1975, the CCC advised W estern to pursue more actively the remote Point Conception (Little Cojo Bay) site.

At this point, Western faced a stalemate involving all three levels of government. On the federal level, the FPC/FERC in favor of the Oxnard site, but the U.S. President's National Energy Plan called for remote siting of LNG terminals. The FPC/FERC also deemed likely to deny the Port of Los Angeles site on grounds of the recently discovered earthquake fault, though this site was favored by the local authorities. Again on the local level, the authorities of Oxnard seemed increasingly unlikely to approve a terminal, and Western faced a complex and lengthy approval process with Santa Barbara County which held approval authority over the Point Conception site. On the state level, it seemed unlikely that the CCC, placing priority on public safety, could be convinced that an LNG terminal was safe enough for the Oxnard and Los Angeles populated areas. But the CCC also faced problems in approving the remote Point Conception site, where the marine life, kelp beds, surfing breaks and spectacular views represented the types of resources the CCC was created to protect. To complicate an already complex situation, this site was being actively opposed by the Bixby & Hollister ranch associations, who owned the land, and by the Sierra Club, which opposed LNG on two fronts: they argued that California did not need the gas, but if it were imported the facility should be on a remote site. In summary, W estern faced the possibility of not obtaining all the needed approvals for any of the three sites.

The LNG Terminal Siting Act of 1977

In view of this impending stalemate the utility companies turned to the state legislature for help. Their goal was to remove permitting authority from the many local interests and the CCC and to place it in the hands of the more congenial California Public Utilities Commission (CPUC). The CPUC was the principal state body involved in power plant issues, primarily in the rate-setting process.

The initial legislation (Bill A B220), introduced by Assemblyman Goggin in response to the growing concern over LNG safety, was, however, not acceptable to the utility companies. Though it would have given the CPUC exclusive authority to certify a proposed LNG facility, it required that the CPUC consider the feasibility of both remote on-shore and off-shore sites. In addition, it required that the CCC and the California Energy Commission (CEC)⁶ offer second opinions on the feasibility decision. The Energy Commission was known to oppose the CPUC on the question of LNG for California; in its 1977 policy report to the Legislature, the Commission raised questions about LNG safety, needs, and costs. In the opinion of W estern, this bill would have effectively prevented the siting of LNG facilities in California (W estern 1978). So W estern's parent company went to battle for a rival bill (S.1081) which vested the CPUC with one-stop licensing authority, precluding any real interference from the Energy Commission.

The resulting legislation was a compromise between the environmentalists, who supported consideration of off-shore sites, and those who saw an urgent need for an LNG facility to assure energy and jobs. The CPUC was chosen over the more conservation-minded California Energy Commission as the agency with state permit authority, preempting local governments. As a bow to the conservationists, the CCC was given the mandate to choose and to rank possible sites, and to pass these rankings on to the CPUC. It was agreed that the site would not be off-shore, as some environmentalists wished, nor could it be in a populated area, as the gas utilities wished. Indeed, a nonpopulated area was strictly defined. There could be no more than an average of 10 people per square mile within one mile of the terminal, and no more than 60 people per square mile within four miles of the terminal.

The Present Status of California's LNG Terminal

In accordance with the Siting Act of 1977, the CCC evaluated 82 sites, 18 of which were nominated by the public. The CCC was required by law to rank the sites proposed by the applicants. Of these 82 sites, only four,⁸ including the Point Conception site, met the population standards, and were not infeasible because of adverse wind and wave conditions, earthquake falts, soil conditions, or other factors. The CCC passed these rankings on to the CPUC, which eliminated all but the third-ranked Point Conception site, finding that transients (campers, etc.) near the sites, on roads and at public parks, made the other sites unsafe.

This, however, was not the end of the story. During the course of this screening process, earthquake faults were discovered at Point Conception. For this reason, the CPUC could only conditonally approve the site, stating in its July 1978 (the deadline date set by the 1977 Siting A ct) decision that this approval was conditional on W estern showing that the faults presented an acceptable risk to the terminal.

At the same time as the state proceedings, W estern had filed with the federal government for a license to import gas to Point Conception. With the reorganization of the D epartment of Energy, the PacIndonesian file was transferred from the ERA to the FERC, which undertook an extensive environmental assessment. Though the staff of the FERC preferred the Oxnard site, the Commission decided in favor of Point Conception to avoid a further confrontation with California law. This approval was conditional upon the results of the fault investigations.

These investigations have revealed additional faults at Point Conception. Spurred by this new information, as well as by a growing sense that California may not need, or want, Indonesian natural gas, opponents have appealed the decision at the federal level. At this time, the W ashington, D.C. Court of Appeals has remanded the case to the FERC, requesting an unconditional "go" or "no-go." Another round of hearings, briefs, and counter-briefs will follow. We await the decision.

Some Issues Raised by the California Siting Process

In the following, the more obvious issues that have become apparent from our study of California's siting process are listed. This list is not in any sense complete and should be considered in the broader context of the 'Issues Paper' by the IIASA /M M T Risk Group. It is hoped that the following discussion will serve as a starting point for discussions with the Task Force M eeting participants.

 In the discussion of siting issues, it is important to begin by making the distinction between the question of *uhether* to site the facility and that of *uhere* to site the facility. Whether to have a facility ultimately depends upon national (regional) interests or objectives. In the energy debate, the lines are often drawn between two different objectives or futures one of large-scale technology, high economic growth rates, and a centralized level of decisionmaking; or one of small-scale technology using, where possible, renewable resources or recycling, steady-state economy, and decentralized decisionmaking. The resolution of this conflict will depend on the political system, where national goals are arrived at through an interaction of various interests. In the case of the California LNG controversy, these interests or "stakeholders" include the industry or utilities, the federal, state and local governments; the organized action groups; the unorganized consumers; those who benefit from an unspoiled coastline and those who benefit, as well as those who do not, from *generalized* economic growth. The question of how legitmate the stakeholders view the political decision process is a basic issue which is germane to most of what follows here.

The question whether to employ a technology is often lost in the debate over where to site the facility. This seems to have been the case in California where, at least at the state level, the question of need was first debated quite late in the process. On the federal level, it is interesting that the utilities' projections of gas needs were adopted by the Federal Power Commission. The only dissenting voice was from the California Energy Commission, a rival of the CPUC, which published a low-energy scenario for California. Though the Energy Commission might have been a logical choice to make the final siting decision (its mandate to site electricity generating plants could have been extended to LNG facilities), the Legislature in the 1977 Siting Act chose instead to give siting authority to the CPUC whose primary role had been a financial regulatory agency. In the Siting Act, the Legislature explicitly decided the question of whether to have a LNG facility and tried to ensure prompt resolution of the siting problem by its choice of the CPUC. However, this decision was made nearly five years after such a facility had been proposed by the utilities.

- 2. This brings up the question of the *direction* of the decision process. In the U.S. energy sector most projects are initiated by the industry, as opposed for example, to the transportation sector where projects (roads, etc.) are planned by the government and carried out by private industry after competitive bidding. A desirable mix of public and private enterprise involves tradeoffs between the advantages of private initiative and those of national planning.
- 3. More specific to the above issue is that of one-stop licensing. Before 1977, the direction of the California process was clearly bottom-to-top since it was necessary for the industry to obtain permits from scores of local authorities. However, this picture was changed by the 1977 Siting Act which gave one agency, in this case the CPUC, the mandate to grant a siting permit (it was also necessary to have federal approval, but the DOE appeared willing to accept the decision of the state). There are obvious pros and cons in this shortened procedure, depending to a large extent on national objectives. Because an LNG facility can benefit the greater population, but can impose costs (risks) on a small local population, a procedure requiring local approval inevitably proves difficult. Yet, if the decision process itself is important, taking the decision out of local control is clearly undesirable.
- 4. An issue related to the question of local sovereignty is that of the appropriate incentive system for choosing an acceptably safe site. If the local government has veto power, it is possible that industry would be compelled to locate where it receives the least resistance, i.e., in remote areas, or to compensate local communities for the risks. Another related, and important, question is who is liable for an LNG accident?
- 5. A difficult question is how the decision process itself can be evaluated, what are the relevant indicators? Included here might be the following:
 - -- Is there a forum for public debate?

- -- W hat are the delays?
- -- A re all the alternatives considered?
- -- Does it encourage the best possible outcome in view of the opposing interests?
- -- How legitimate do the stakeholders view the process?

The move to one-stop licensing seems to represent a tradeoff between the first two of the above. The purpose of the 1977 Siting A ct was to ensure the siting of an LNG terminal without extensive delay--at some sacrifice in local participation. This A ct, in the interest of maximizing public safety and minimizing further delay, might have precluded finding an optimal site by imposing the population and the on-shore siting constraints. By "optimal" we can begin by asking whether, in the absence of these constraints, a site could have been identified that would have been viewed as more desirable by *all* the parties. A more difficult definition of "optimal" would involve making equity judgments, or finding a site that would have been preferred by some people at the expense of others. It seems that the Oxnard site was favored by nearly all the stakeholders including the utilities, the Sierra Club," the CPUC, the CEC, and the FERC. A puzzling question is how a site that had support from so many opposing groups could have been ruled out by the political representatives.

Finally, we might want to consider if this process, either pre- or post- the 1977 legislation, encourages an imaginative consideration of all the possible alternatives. For instance, is it necessary to have one large facility, or could one imagine a series of storage facilities presenting risks on the same order as peak-shaving plants located in industrial areas? Or, were the possibilities for off-shore siting given sufficient consideration? Where a project is defined by industry before it is considered by government planners, there exists the danger of tying the decisions to minor variations of the proposed concept.

6. Turning to the role 'risk' played in this process presents a number of exciting issues. There are, of course, technical problems of estimating the possible consequences and their probabilities, determining the error bands for existing estimates and designing tests, experiments and models for improving these estimates. An equally important problem concerns the public perception of the risk what factors or dimensions of the hazard explain the observed reactions, can public response be in any sense predicted? W hat role do the media, the information campaigns, and published risk assessments play? Here analogies to the nuclear power debate become apparent-large-scale technology, low-probability, high-consequence events, involuntary, passive exposure, etc.

Of particular interest is the catastrophic, or potential holocaust dimension of the risk which seems from a number of published sources to have played a major role in public perception of nuclear power. In the case of LNG, this aspect of the risk might be viewed as having been the decisive element in the California LNG siting debate. One possible hypothesis is that the siting procedure would have proceeded routinely, that is, after completion of all the necessary reports and hearings, the facility would have been located at Oxnard as recommended by the FPC, had it not been for one crucial event: the publication of a worst-case scenario showing that 50,000 residents of Oxnard could be victims of an ignited LNG vapor cloud. After publication of this report not only the public, but all the relevant government agencies with the exception of the FPC/FERC, became increasingly risk averse. This report seems to have had considerably more effect on sensitizing the public to the risks of LNG than an earlier event, the explosion of an oil tanker in the Los Angeles harbor. The latter showed that an accident was possible whereas the former showed that a holocaust was possible! The differences in public reaction might be explained by the existence of a comparatively well-organized opposition in Oxnard drawing especially from the 10,000 residents who were within a two-mile radius at the proposed facility. Yet, the publication of a catastrophe scenario certainly had a profound effect. (This is especially interesting since it seems that there was a similar turning point in the siting of an LNG facility in the Netherlands.)

- 7. Another important issue concerns the costs of the decision process. One estimate by the utility puts the cost of delay at about \$1 million per day. To this figure one would have to add the costs of the myriad of reports, hearings, consultants, etc. How would the final figure compare with the extra cost of remote siting of an off-shore facility, of a more (or less) expensive alternative to LNG? Would it be possible, for example, to move the residents from the two-mile radius (or a 5-mile radius) of the Oxnard site at a cost less than that of the cumbersome decision process?
- 8. A nother point that might be investigated is the absence of any sort of referendum on the LNG question in California for Los Angeles, Oxnard, or Point Conception. Could the results of such a referendum be *ex post* predicted?
- 9. In this regard, a decision-analytic framework might be an appropriate starting point. The most important role for a systematic approach to decisionmaking is to help specify a likely scenario with respect to a particular problem based on discussions with the key stakeholders. In so doing, it is particularly important to specify the set of decisions that have to be made and the role each stakeholder is likely to play with respect to each of the many decisions.

NOTES

- 1. Pacific Lighting Corporation is the parent holding company of Southern California Gas Co. PacIndonesia and Western are now 50% owned by Pacific Gas and Electric Co. and Pacific Lighting Corporation.
- 2. The FPC was essentially a financial regulatory agency with a mandate to regulate pricing policies and charged with approving gas import projects. In 1977, it was absorbed by the Federal Energy Regulatory Agency (FERC) and the Energy Regulatory Administration (ERA) of the newly created D epartment of Energy.
- 3. The explosion of the ship, Sansinena, in the harbor (December, 1976), did shake the Council's beliefs; however, after commissioning a "thorough" study, the Council voted almost unanimously in favor of the terminal.
- 4. The population of Oxnard is approximately 100,000; around 20,000 persons would be living within two miles of the planned facility, but only very few people within one mile.
- 5. The Coast Guard, under the Department of Transportation (DOT), exercises marine safety regulatory authority over LNG tanker construction and operators and over parts of the terminal. The OPSO, also a part of DOT, has on-shore regulatory authority. There exists a memo of understanding for these overlapping mandates.
- 6. The California Energy Resources Conservation and Development Commission (the Energy Commission) was created in 1974, by, as the title suggests, both the environmentalists and the utility interests. The Commission was charged with the promotion of conservation and alternative technologies and was given the authority to issue power plant string certificates--a way of streamlining the siting procedures. (For a brief case history of the Commission see M cD onald 1979.)
- 7. The CEC reports to the legislature in a biennial report on California's future energy needs and supplies. It has developed a sophisticated forecasting model which generated demand projections below those of the CPUC and of industry. The role of the CEC in the LNG siting process is one of technical consultant to the CPUC.

- 8. These sites, in order of their ranking, are the U.S. Marine Corps base at Camp Pendelton, Rattle Snake Canyon, Point Conception and Deer Canyon.
- 9. The Sierra Club changed its stand in early 1977 to oppose the Oxnard site.

REFERENCES

- Ahem, William R. 1978. Energy Facilities and the California Coastal Act. San Francisco: California Coastal Commission.
- California Public Utilities Commission. 1978. Final Environmental Impact Report for the Point Conception LNG Terminal Project. Vol. I. Summary of Revisions to Draft EIR California.
- Federal Power Commission. 1976. Final EIS on WLTC's Proposed Point Conception, California LNG Terminal. A pril.
- M cD onald, A lan. 1979. A Short Case History of the California Energy Commission
- Science Applications, Inc. (SAI). 1975a. 'LNG Terminal Risk Assessment Study for Los Angeles, California.'' Prepared for Western LNG Terminal Company, SAI-75-614-LJ. La Jolla, California. (Chapters 1, 8, & 9 only).
- SAI. 1975b. 'LNG Terminal Risk Assessment Study for Oxnard, California.' Prepared for Western LNG Terminal Company, SAI-75-615-LJ. La Jolla, California.
- SAI. 1976. 'LNG Terminal Risk Assessment Study for Point Conception, California.' Prepared for Western LNG Terminal Company. SAI-75-616-LJ. La Jolla, California.
- Socio-Economic Systems. (undated). on Draft Environmental Impact Report for the Proposed Oxnard LNG Facilities Los Angeles, California.
- U.S. Department of Transportation (US DOT). 1980a. Liquified Natural Cas and Liquified Petroleum Cas: Views and Practices. COMDTINST M 16616.4. Washington, D.C.: Coast Guard.
- US DOT. 1980b. Liquified Natural Gas Facilities; Federal Safety Standards; Final Rule and Proposed Regulating, Federal Register, February 11.
- Western LNG Project. 1978. 'Final Environmental Impact Statement,' FERC/EIS-0002F. Washington, D.C.: Federal Energy Regulatory Commission. Vol. I, No. CP75-1040; Vol. II, No. CP75-83-2; and Vol. III, No. CP75-140.

A PPEND IX

,

INDONESIA LNG PROJECT - SUMMARY OF MAJOR EVENTS

	877	1973 .		. 175	1976		17/1		
JAN.			INDONE \$1AH GOVERNMENT REFUSES FG APPROVE PAC PHONE STA CON-	PACINDONESIA AND PERFAMINA AGREE TO LING PRICING FORMULA	PACINDONESIA SIGNS MENGARAN- DUNI UL UNDERSTANDING WITH PACIFIC GAS AND FIECIRIC	INFILM, STATE LNG LEGISLATION INTRODUCELY IN CALIFORNIA	PETITIONS FOR RELEARING OF ERA DECTSION FILED.	SCUNG FILED FOR CONSULIDATION OF HEARINGS	34
			TRACT.	CHANGES. California Energy	COMPANY IN PROÆCT.	(offshore siting possible)		FERC EVIDENTUARY HEARINGS COMPLETED, BRIEFING SCHEDINF STABLISHED	
10.			PACINDONESIA SUPPLEMENTAL APPLICATION FILED WITH FPC.	Commission Lreated		FPC HEARINGS CONCLUDE ON PAC- INDONESIA PROJECT.	TRA GRANTS REHEARING ON CERTAIN LERTAIN ISSUES.	FERC SUSPENDS BRIEFING STHEDINE IN SITING CASE	41
·								•	
MAR				REVISED LNG CONTRACT APPROVED		CALIFORNIA ASSEMULY SUBCOM-	NEGOTIATIONS BEGIN WITH	TEMPORARY INJUNICEION (SSLED	
				BY INDONESIAN GOVERNMENT AMENDMENTS FILED WITH FPC ON		MITTE ON ENERGY BEGINS HEAR- INGS ON LNG LEGISLATION.	PERTAMINA ON A REVISED PRIEING PROVISION,	LIMITING NATIVE AMERICAN SITE ACCESS FOR STRICTLY RELIGIOUS PURPOSES	
				ING CONTRACT CHANGES AND OXWARD TERMINAL STIL.					
APR.				FPC CONSOLIDATES WESTERN LNG AND PAC INDONES IN APPLICATIONS.		CONTRACT FOR THIRD TIME, TO OCTOBER 6, 1977.	BAY SITE ISSIED	CONSOLIDATION MUTICALAND CONSOLIDATION MUTICALAND REINSTATES BRIEFING SCHEDUIE	
						OXNARD PLANNING COMMISSION CERTIFIES THE STATE FIR IS	(Pendlaton first)	ERA ISSUES OPINION NUMBER SIX. ON TREATMENT OF COSTS	ļ
MAY					DRAFT FEDERAL ENVIRONMENTAL IMPACT STATEMENT ISSUED.	adequate, but approval appears unlikely	ERA AND FERC RESOLVE JURISDIC- TIONAL ISSIES.		
				California Coastal Plan: CCC favors remote siting					
JUN,	SUMMER						INDIANS ANNOUNCE RELIGIOUS SIGNIFICANCE OF SID	I CRC REF (IS REDIEST-OR 300)- TIONAL GAS SH22LY STUDES	
	DISCOVERY OF NATURAL GAS IN ARUN FIELD PUBLICLY ANNOUNCED.					Los Angeles City Council approves harbor		CALIFORNIA SUPRIAM TOURT DENTI WRITE OF REVIEW.	
ta .					CALIFORNIA 455EMBLY SUB-	FPC ADMINISTRATIVE LAW JUDGE	RENEGOTIATED LNG PRICING PRO-	CPUC REAFEI2MS 1(4.4.3) 1978	10
					COMMITTEL ON ENERGY BLGINS HEARINGS ON STATE'S ROLL IN SITING LNG RECEIVING TERMINALS	RECONVENDS APPROVAL OF INDO- NESIAN PROJECT AND OXNARD AS SITE.	CPUC conditionally	DECTSION ON REMINAL STU	
					California Coast Act	Western faces stalemate	approves terminal site		
AUC.					suggests remote siting	JAPAN RECEIVES FIRST SHITMENTS OF INDONESIAN LNG FROM BADAK FACILITY.	PETTERNS FOR REFERENCE CPUC DECESION FILED.	APPROVES TERMINAL SITE	ľ
					Draft EIR for Ownerd			ļ	
SEP	LETTER OF INTENESIGNED BY PACENDONESIA AND PERTAMINA	CONTRACT STORED BY PACINDO- NESTA AND PERTAMINA TO PUR-	WESTERN UNG FILED APPLICATION WITH FPC FOR TERMINAL FACILI-			GOVERNOR BROWN SIGNS THE CALIFURNIA LNG TERMINAL SITING	IAPAN RECEIVES FIRSE SHIPMENTS O INDONESTAN ENG FROM ARUN FACE-	ERA GRANTS FINAL APPROVAL TO IMPORT LNG	Я
	FOR PURCHASE OF LNG	CHASE LNG.	POINT CONCEPTION.		Ì		APPLICANIS' MOTION FOR EXPEDIT- ING PROCEDURES FILED WITH ERA AN	DOE DELLGATS TERMINAL STING BINNER THEY TO FERC	
OC 1.			Submits Risk Assessment Study			DEPARTMENT OF LINERGY (DOC)	TERC REQUESTING DECISION ON STR.	FERC conditionally approves terminal site	U
						CREARD.	APPROVING REVISED CONTRACT	PUC RESOLVES ATH QUALITY MITTIC TRANCONDITIONS, CONSTRUCTION PERIOD TRANSPORTATION PERIOD	
						WESTERN LNG FILES APPLICATION	FERC STAFF RELEASES FEES.	SLAWATER INTAKE SYSTEM AND POWERI INE RUITE	
						WITH CPUC FOR INITIAL UNG RECTIV ING RERMINAL AT COJO BAY NEAR POINT CONCEPTION.	1		
NOV.		PACINDONESIA APPLICATION TO IMPORT LNG FILED WITH FPC.				ERA OF DOE BEGINS OR AL HEARINGS ON INDONESIAN ENG PROJECT.	CPUC DENIES PETITION'S FOR REHEAD ING.		
						CPUC BEGINS HEARINGS ON APPLI- CATION FOR TERMINAL WESTERNING FULLS AND WHAT IN WIT	OPPONENTS FILE WITH CALIFORNIA SUPREME COURT SEEKING REVERSAL OF CPUC SITING DECISION.		
	ļ				Į	ERA 10 CONSTRUCT ING RECEIVING TERMINAL AI CORD BAY SITE.	SCLING FILLS APPLICATION WITH FERG FOR DEER CANYON RECEIVING HERMINAL		
DEC.		JAPAN SIGNS ING CONTRACT WITH FERTAMINA,		FPC HEARINGS BEGIN ON INDO- NESIAN PROJECT.	UIL TANKER SANSINENA EXPLODES IN LOS ANGELES HARBUR	ERA ISSUES OPINION NUMBER ONE CONDITIONALLY APPROVING LNG FROM INDONESIA - PRICING PRO	HE MRINGS BEGIN AT FERCION FEIS		1
					FINAL FEDERALEIS ISSTED.	VISION DISAPPROVED			
	· · · · · · · · · · · · · · · · · · ·		<u> </u>	1975	1976	1977		N7t	Ĺ

.